FAA NATIONAL OPERATIONS AND TRAINING MANUAL FOR THE NON-ACCEPTANCE AND NON-TRANSPORT OF DANGEROUS GOODS IN AIR TRANSPORTATION

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June 24, 1998

DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINSTRATION

CIVIL AVIATION SECURITY

GREAT LAKES REGION

Record of Changes

FAA NATIONAL OPERATIONS AND TRAINING MANUAL FOR THE NON-ACCEPTANCE AND NON-TRANSPORT OF DANGEROUS GOODS IN AIR TRANSPORTATION – Current Changes Appear In **Bold** Throughout The Manual**.**

Change Number to Basic Manual Dated June 24, 1998	Date		Change Number to Basic Manual Dated June 24, 1998	Date
1	**June 21, 2001**			

FAA NATIONAL OPERATIONS AND TRAINING MANUAL FOR THE NON-ACCEPTANCE AND NON-TRANSPORT OF DANGEROUS GOODS IN AIR TRANSPORTATION

_____
(Air Carrier Name)

_____
(Certificate Number)

_____
(Physical Address)

_____
(City) (State) (Zip Code)

_____ _____
(Telephone) (Fax)

_____ _____
(Signature Block) (Signature Block)
Corporate Officer Responsible Hazardous Materials Officer

Statement of Intent: Air Carrier **WILL NOT ACCEPT** Dangerous Goods (DG) for Air Transport

Will Transport Commercial DG? ❒ NO

Will Transport Own DG Company Material (COMAT)? ❒ NO

_____ _____
Recommend Acceptance/Approval Accepted/Approved
CAS Dangerous Goods Coordinator FSDO Principal Operations Inspector

_____ _____
Date Date

This Dangerous Goods Operations and Training Manual complies with the requirements found in 14 CFR.

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GENERAL

Notwithstanding the contents of this manual, this air carrier is responsible for compliance with all provisions of the Hazardous Materials Regulations (HMR), Title 49, Code of Federal Regulations (49 CFR) and Title 14 Code of Federal Regulations (14 CFR).

This manual is intended to insure that no employee, agent, or contract employee of this air carrier will accept and/or cause to be transported any hazardous material, as defined in 14 CFR and 49 CFR. This carrier shall review this manual at least annually to ensure compliance with both 14 CFR and 49 CFR.

The provisions of this manual shall be adhered to by all employees, agents, and contract employees of this air carrier, when they are involved in the acceptance, handling, and storage of freight or Company Material (COMAT) destined to be and/or having been transported in air commerce, and in handling checked baggage and/or passenger carry-on baggage. Further, these individuals must have satisfactorily completed this carrier's Hazardous Materials Recognition Training Program within the preceding 12 calendar months. The training requirements are found in Part Two of this manual.

In order to comply with 49 CFR, as well as the 14 CFR regulations, a current copy of this manual, and of the pertinent portions of the regulations, shall be available at each station of this air carrier where freight, COMAT, checked baggage and/or passenger carry-on baggage are accepted for transportation in air commerce.

This air carrier shall insure that hazardous material information warning signs (49 CFR 175.25 and 175.26) are prominently displayed at appropriate locations, advising shippers/passengers of the potential hazards and penalties associated with the offering and/or carriage of such materials aboard an aircraft if the shipper, and/or the operator, fails to comply with the regulations.

The terms Dangerous Goods and Hazardous Materials (DG/HM) are synonymous and may be used interchangeably. Dangerous goods and hazardous materials are sometimes also referred to as regulated materials, restricted articles, and dangerous materials.

This air carrier will insure that all DG/HM COMAT, will be offered to a different mode of transportation (e.g., ground) and/or an air carrier that is authorized to transport DG/HM. Any employee, agent, or contract employee of this air carrier who prepares and/or offers DG/HM COMAT for shipment via any mode must be fully trained as a DG/HM shipper.

PART ONE

DANGEROUS GOODS OPERATIONS

I. RESPONSIBILITIES

49 CFR prescribe requirements for shippers of DG/HM to properly declare any such material at the time it is offered for transportation to the carrier. Air carrier employees, agents, and contract employees may rely on the certification and information provided by the shipper to determine if the shipment is authorized for air transportation. Therefore, it is acceptable practice to assume that a DG/HM package may be recognized by its conspicuous markings and label(s), which are required to be displayed on the outside of the package, and by the shipping document which must be a part of the offering and must accompany the shipment during transportation.

This air carrier shall review documents tendered with the shipment for any indication that the item(s) is DG/HM. All employees, agents, and contract employees of this carrier responsible for the acceptance of cargo or baggage shall be provided a trigger list of indicators of undeclared DG/HM (See Appendix A, Hidden Shipment Indicators) to assist them in their review.

Air carrier personnel accepting air cargo, packages, and passenger baggage must be especially vigilant in screening all such items, and when appropriate, question persons offering cargo, packages, or baggage as to the contents and thereby prevent the inadvertent acceptance and transportation of such unauthorized materials.

Any package that displays a DG/HM marking or label, as shown in the latest DOT labeling chart (See Appendix B, DOT Chart), or otherwise is known or suspected of containing DG/HM, will not be accepted for air transportation or loaded aboard an aircraft.

II. COMPANY MATERIALS (COMAT)

COMAT is an industry term developed and used by air carriers and is generally used to describe a wide array of company materials including replacement items for installed equipment and consumable materials. (See Appendix C, Hazardous Materials Onboard Aircraft)

DG/HM COMAT will not be transported on this air carrier. The ONLY exception for this air carrier is:

A tire assembly with a serviceable tire is not subject to the provisions of this subchapter provided the tire is not inflated to a gauge pressure exceeding the maximum rated pressure for that tire (See 49 CFR 175.10(a)(2)(iii)).

This air carrier shall carefully scrutinize all COMAT received from Repair Stations and Parts Suppliers to determine if the material is DG/HM before introducing it into the transportation system.

Shipments of DG/HM COMAT that are offered for transportation by this air carrier to other modes or air carriers must be in full compliance with all provisions of the Hazardous Materials Regulations. Employees, agents, and contract employees who prepare and/or offer DG/HM shipments for transportation must receive additional function-specific training to satisfy all of the requirements for shippers under 49 CFR 172.700.

III. PRE-BOARD INSPECTION

No employee, agent, or contract employee shall load any cargo or baggage containing indicators of DG/HM aboard an aircraft, onto an aircraft pallet, or into a Unit Load Device (ULD) unless it can be verified that the contents are not DG/HM.

IV. DG/HM EXCEPTIONS

Certain materials which are normally regulated as dangerous goods are excepted from the HMR. They are set forth in **Appendix D, DG/HM Exceptions** of this manual and 49 CFR 175.10.

V. ACCEPTANCE OF WHEELCHAIRS/MOBILITY AIDS

This air carrier will accept battery-powered wheelchairs/mobility aids as baggage. Wheelchairs/mobility aids will be transported with the battery attached, except when otherwise noted. In no case, may a battery be transported if it exhibits evidence of previous leakage or damage.

Wheelchair batteries are either "spillable" or "non-spillable." A non-spillable battery will normally be labeled as such. In the absence of a label, a battery whose caps or cover cannot be removed is considered to be non-spillable; if the caps or cover can be removed, it is considered to be spillable.

a) Wheelchairs/mobility aids with non-spillable batteries may be accepted for carriage with the battery attached when properly prepared (the battery is disconnected and terminals and ends of cables are insulated to prevent short circuits). Batteries manufactured after September 30, 1995, must be marked on the outside of the battery case, "NON-SPILLABLE" or "NON-SPILLABLE BATTERY." If the wheelchair cannot be loaded/stowed in an upright position, it is advisable that the battery be removed and packaged in a suitable package.

b) Wheelchairs/mobility aids with spillable batteries may be accepted for carriage with the battery attached, if the wheelchair can be loaded/stowed/unloaded in an upright position and the battery is disconnected and terminals are insulated to prevent short circuits.

If this requirement cannot be met, the battery must be removed from the housing by qualified airline personnel only, and transported in strong, rigid packaging under the following conditions:

- The packaging must be leak-tight and impervious to battery fluid. An inner liner may be used to satisfy this requirement if there is absorbent material placed inside of the liner and the liner has a leakproof closure;
- The battery must be protected against short circuits, secured upright in the packaging, and be packaged with enough compatible absorbent material to completely absorb liquid contents in the event or rupture of the battery; and
- The packaging must be labeled with a CORROSIVE label, marked to indicate proper orientation, and marked with the words, "Battery, wet, with wheelchair."
- The Pilot-In-Command must be advised either orally or in writing prior to departure as to the location of the spillable battery aboard the aircraft.

VI. NOTIFICATION OF DG/HM INCIDENTS AND REQUIRED REPORTS

A. Incident Notification (See 49 CFR 171.15)

1) This air carrier SHALL REPORT TO THE NEAREST FAA CIVIL AVIATION SECURITY OFFICE IN THE REGION OF DISCOVERY BY TELEPHONE AT THE EARLIEST PRACTICABLE MOMENT AFTER EACH INCIDENT THAT OCCURS DURING THE COURSE OF TRANSPORTATION (including loading, unloading, or temporary storage) in which:

a) A person is killed; or
b) A person receives injuries requiring hospitalization; or
c) There is an estimated $50,000 in property damage; or
d) An evacuation of the general public occurs lasting one or more hours; or
e) One or more major transportation arteries or facilities are closed or shut down for one hour or more; or
f) The operational flight pattern or routine of an aircraft is altered; or
g) Fire, breakage, spillage, or suspected radioactive contamination occurs involving shipment of RAM; or
h) Fire, breakage, spillage, or suspected contamination occurs involving shipment of infectious substances (etiologic agents); or
i) A situation exists of such a nature (e.g., a continuing danger to life exists at the scene of the incident that, in the judgment of the carrier, it should be reported to the Department even though it does not meet the criteria of paragraph 1)(a), (b), or (c) of this section.

2) Radioactive Materials (RAM) - In addition to the notification to the FAA, this air carrier will also make a telephone notification to the shipper of the RAM involved in the incident.

3) Infectious Substances (etiologic agents) - In addition to the notification to the FAA, this air carrier will also notify the Center for Disease Control (1-800-232-0124) of any infectious substance involved in the incident.

B. Incident Reports (See 49 CFR 171.16)

This air carrier shall report in writing, in duplicate, on DOT Form F 5800.1, within 30 days of the date of discovery, each incident that occurs during the course of transportation (including loading, unloading or storage, incidental thereto) in which any of the circumstances set forth in 49 CFR 171.15(a) occurs or there has been unintentional release of hazardous materials from a package or quantity of hazardous waste has been discharged during transportation. A copy of DOT Form F 5800.1 will be forwarded to:

1) Information Systems Manager, DHM-63
   Research and Special Programs Administration
   Department of Transportation
   Washington, DC 20590-0001

2) The nearest FAA Civil Aviation Security Office in the Region of discovery at the earliest practicable moment after each incident that occurs during the course of transportation (including loading, unloading, or temporary storage);

Instructions for completing DOT Form F 5800.1 are included in Appendix E, Guide for Preparing Hazardous Material Incident Reports.

C. Report of Discrepancies (See 49 CFR 175.31)

Undeclared shipments are classified as discrepancies and must be reported to the FAA. In the event of a discovered undeclared shipment, following its acceptance for transportation aboard an aircraft, this air carrier SHALL AS SOON AS PRACTICABLE NOTIFY THE NEAREST FAA CIVIL AVIATION SECURITY OFFICE BY TELEPHONE AND SHALL PROVIDE THE FOLLOWING INFORMATION:

1) Name of employee, agent, or contract employee making the report;
2) Company name of the aircraft operator;
3) Specific location of the shipment concerned;
4) Name of the shipper; and
5) Nature of discrepancy.

EMERGENCY RESPONSE CONTACTS
(Please have the Air Carrier fill in the blanks)

CONTACT	PHONE NUMBER
Local FAA Civil Aviation Security Field Office	
FAA Regional Operations Center (24-hour contact)	
FAA Flight Standards District Office (FSDO) (Holding FAA Certificate)	
Airport Police	
Fire Department	
Ambulance/Hospital	
Center for Disease Control	1-800-232-0124
CHEMTREC	1-800-424-9300
State Department of Emergency Services	
Disposal of Hazardous Materials (Residue of spills, cleanups, etc.)	
For Radioactive Materials:	
Department of Energy (DOE)	202-586-8100
Nuclear Regulatory Commission (NRC)	301-816-5100
State Radiation Control	

NOTE: The North American Emergency Response Guidebook is a valuable resource when handling DG/HM incidents.

PART TWO

DANGEROUS GOODS TRAINING

I. REQUIREMENTS

Each employee, agent, and contract employee of this air carrier who performs any assigned duties or responsibilities for acceptance, handling, storage, and transportation of cargo, baggage, and COMAT shall be familiar with the company policy regarding the non-acceptance of DG/HM, the requirement for training, their responsibilities regarding the recognition of DG/HM, local emergency procedures, and the requirement for official notification of any incident or accident involving a DG/HM.

This air carrier shall not use any individual to perform the above-stated duties unless the individual has satisfactorily completed an initial course of study and an oral or written test regarding dangerous goods. All incorrect answers shall be reviewed with the trainee until proficiency is achieved.

In addition, within the preceding 12 calendar months, the individual must have received either initial training or annual recurrent training and satisfactorily completed an oral or written test. All incorrect answers shall be reviewed with the trainee until proficiency is achieved.

This air carrier shall maintain a record of the satisfactory completion of the initial and recurrent training for each individual. These records will be available at the location where the personnel perform such duties, and will be maintained for as long as the employee is performing these duties and for 90 days thereafter.

II. TRAINING CURRICULUM

The list below will be covered during the initial and recurrent training of each employee, agent, and contract employee of this air carrier. The material will be covered in such scope and depth as to provide each individual with sufficient knowledge of applicable regulations and procedures to safely accomplish their specific duties. This air carrier will ensure that all materials and regulations used in its training curriculum is current and valid at the time of the training.

Module 1 - DG/HM General Recognition Training

A. Company Policy and Training Requirements

B. Applicable Regulatory Materials

C. Hazard Class Definitions and Examples ~ 49 CFR 171.8

D. Enforcement

E. Hidden Shipment Indicators ~ Appendix A
F. Suspicious Cargo and Baggage Awareness

G. Communication Components of Dangerous Goods ~
- Shipping Papers ~ 49 CFR Part 172 Subpart C
- Marking ~ 49 CFR Part 172 Subpart D
- Labeling ~ 49 CFR Part 172 Subpart E

H. DG/HM COMAT
- Identification and Recognition
- Hazardous Materials Onboard Aircraft ~ Appendix C
- Replacement Components
- Consumable Materials
- Specific DG COMAT Exception ~ 49 CFR 175.10(a)(2)(iii)
- Facility Storage, Safe Movement, and Handling Requirements ~ 49 CFR 175.78
    - Specific Hazards and Precautionary Measures
- Proper Disposal Procedures for DG COMAT
    - Environmental precautions
    - Transportation precautions

I. Reporting Incidents and Discrepancies ~ 49 CFR 171.15, 171.16, 175.31, and Appendix E

J. Exceptions for DG/HM ~ 49 CFR 175.10

Module 2 – Testing ~ In accordance with 49 CFR 172.702(d)

NOTE: The recommended length of training time is four (4) hours for Initial Training, and two (2) hours for Recurrent Training.

APPENDIX A

HIDDEN SHIPMENT INDICATORS

Cargo and baggage offered to an air carrier under a general description may have hazards that

are not apparent. The Hazardous Materials Table in 49 CFR Part 172 is not complete and shippers and passengers may not be aware of this. Some of these consignments have caused incidents that could have seriously endangered the safety of the aircraft and/or its passengers.

Air Carrier personnel should be alert to these possible hazards. Items found containing a hazardous material need to be shipped in accordance with the 49 CFR/ICAO Technical Instructions.

NAME	**REMARKS**
Aircraft Parts/COMAT	May indicate the presence of chemical oxygen generators, flammable liquids/solids, corrosives, compressed gases, radioactive materials in aircraft parts and accessories, or general company materials.
Automobile Parts (car, motor, motorcycle)	May contain cellulose paints, wet batteries, shocks/struts with nitrogen, air bag inflators/air bag modules, etc.
Batteries (Corrosive)	**May contain battery terminals that are not grounded properly and could short circuit.**
Breathing Apparatus/SCUBA	May indicate compressed air or oxygen cylinders.
Bull (or other animal) Semen	May involve use of refrigerant (e.g., Liquid Nitrogen).
Camping Equipment	**May contain flammable liquids, gas or solids.**
Chemicals	Often found to be hazardous.
Cryogenic (Liquid)	Indicates low temperature, low pressure, or non-pressurized gas such as Argon, Helium, Neon, and Nitrogen
Cylinders	May indicate compressed gas
Dental Apparatus	May contain hazardous chemicals such as resins or solvents
Electrical Equipment	May contain magnetized materials or mercury in switch gear and electron tubes
Fireworks	**May contain an explosive material**
Flammable Gas Torches	**May contain a flammable gas, an oxidizer or loose safety devices**
Fuel Control Units	**May contain a flammable liquid**
Electrically powered	May contain wet batteries apparatus (wheelchairs, lawn mowers, golf carts, etc.)
Frozen Fruit, vegetables	May be packed in Dry Ice (Solid Carbon Dioxide)
Gasoline Powered Devices	**May contain corrosives, flammable liquids, etc.**
Oxygen Generators	**May contain an Oxidizer material.**
Household Goods	May contain hazardous materials such as paint, aerosols, bleaching powder, etc.
Hydrogen Peroxide	**May contain a forbidden Oxidizer**
Instruments	May conceal barometers, manometers, mercury

	switches, rectifier tubes, thermometers containing mercury
Laboratory/Testing	May contain various hazardous chemicals
Machinery Parts	May include hazardous chemicals (adhesives, paints, sealants, solvents, etc.)
Medical Supplies/Equipment/Oxygen (Test Kits)	**May contain various hazardous chemicals**
Pharmaceuticals	May contain various hazardous chemicals
Photo Supplies	May contain various hazardous chemicals
Refrigerators	May contain restricted gases or liquids
Repair Kits (or Spares or Spare Parts)	May contain various hazardous materials (adhesives, solvents, cellulose paints, organic peroxides, etc.)
Samples for Testing	May contain various hazardous materials (including infectious substances)
Swimming Pool Supplies	May contain acid, chlorine
Switches in Electrical Equipment or Instruments	May contain mercury
Tear Gas Dispensers	Contains irritating material or pepper gas which is forbidden on passenger aircraft
Toys	May be made of celluloid or other flammable material
Uninterruptible Power Sources	**May contain battery terminals that are not grounded properly and could short circuit.**
Vaccines	May be packed in Dry Ice (Solid Carbon Dioxide)

Note 1: Articles which do not fall within the hazardous materials definitions of 49 CFR and which, in the event of leakage, may cause a serious cleanup problems or corrosion to aluminum on a long term basis must be checked by the shipper to at least ensure that the packaging is adequate to prevent leakage during transportation. These may include brine, powered or liquid dyes, pickled foodstuffs, etc.

Note 2: Magnetized material, as defined in 49 CFR, with a gauss reading of more than 0.00525 is forbidden for air transportation and a package with a reading of 0.00525 or less is not regulated. The ICAO and IATA Regulations regulate magnetized material with a reading between 0.002 gauss and 0.00525 gauss, thus requiring a magnetized material label.

APPENDIX B

DOT CHART
Hazardous Materials Marking, Labeling & Placarding Guide

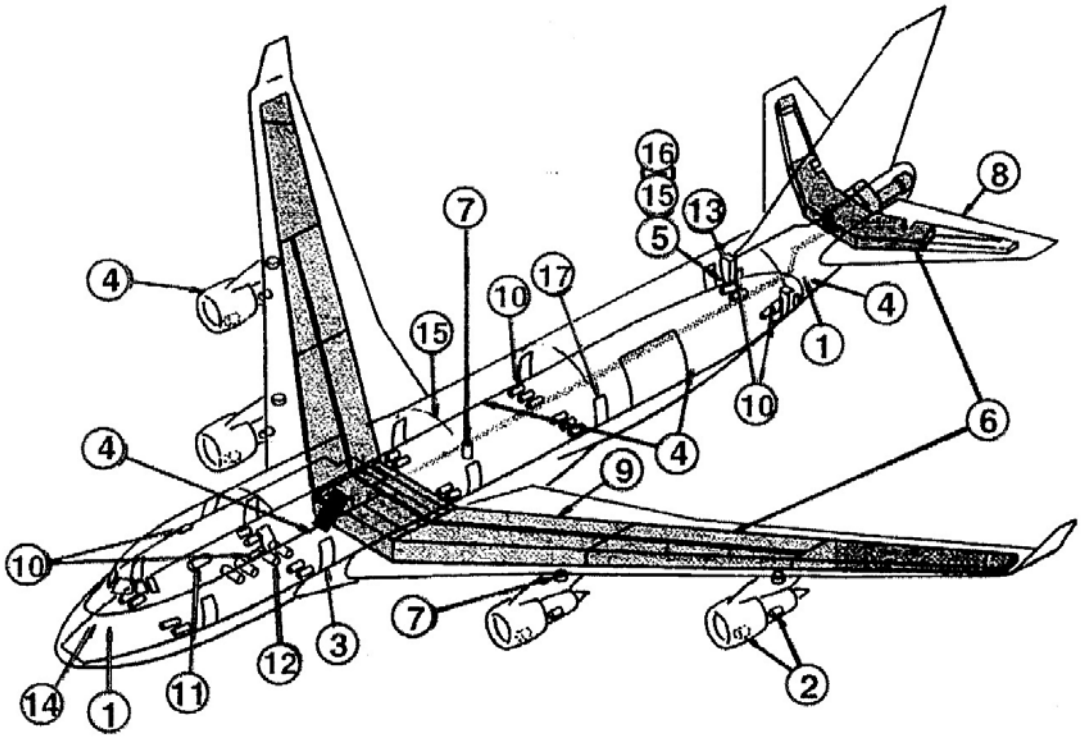
SEE ATTACHED

You may order the most current copy of the DOT CHART by accessing the following Internet Page:

http://hazmat.dot.gov/hazhome.htm

APPENDIX C

Hazardous Materials Onboard Aircraft



1. **Batteries, Aircraft** (qty. 2)
2. **Engine Oil** (as hazardous waste)
3. **Escape Slides/Life Rafts** (all entry doors/rafts optional)
4. **Fire Bottles** (APU, engines, lower cargo compartment, and lavatory waste containers)
5. **Fire Extinguishers** (attendant stations, closets, galleys, etc.)
6. **Fuel**
7. **Hydraulic Fluid, Reservoirs** (as hazardous waste)
8. **Uranium** (depleted, counter-balance weights)
9. **Ordnance Devices** (off-wing escape)
10. **Oxygen Bottles, Portable, Gaseous**
11. **Oxygen Bottles, Crew System, Gaseous**
12. **Oxygen Bottles, Passenger System, Gaseous** (Standard)
13. **Oxygen Generators** (optional: each PSU standard: each attendant station and lavatory)
14. **Rain Repellant**
15. **Refrigerant** (located in each galley)
16. **Smoke Hoods**
17. **Tritium Signs** (aisle and emergency exit doors)

APPENDIX D

The following are exceptions to 49 CFR, as stated in Section 175.10, Exceptions, and may be carried aboard company aircraft.

a) This subchapter does not apply to:

1) Aviation fuel and oil in tanks that are in compliance with the installation provisions of 14 CFR, Chapter 1.

2) Hazardous materials required aboard an aircraft in accordance with the applicable airworthiness requirements and operating regulations. Unless otherwise approved by the Associate Administrator for Hazardous Materials Safety, items of replacement for such hazardous materials must be transported in accordance with this subchapter except that –

(a) A tire assembly with a serviceable tire is not subject to the provisions of this subchapter provided the tire is not inflated to a gauge pressure exceeding the maximum rated for that tire.

3) Hazardous Materials loaded and carried in hoppers or tanks of aircraft certificated for use in aerial seeding, dusting, spraying, fertilizing, crop improvement, or pest control, to be dispensed during such an operation.

4) The following hazardous materials when carried by a passenger or crew member for personal use in conformance with the following conditions:

(i) Non-radioactive medicinal and toilet articles (including aerosols) may be carried in checked or carry-on baggage;

(ii) One self-defense spray (see §171.8), not exceeding 118 ml (4 fluid ounces) by volume, that incorporates a positive means to prevent accidental discharge may be carried in checked baggage only;

(iii) Other aerosols in Division 2.2 with no subsidiary risk may be carried in checked baggage only; and

(iv) The aggregate quantity of hazardous materials carried by the person may not exceed 2 kg (70 ounces) by mass or 2 liters (68 fluid ounces) by volume and the capacity of each container may not exceed 0.5 kg (18 ounces) by mass or 470 ml (16 fluid ounces) by volume.

5) Small-arms ammunition for personal use carried by a crewmember or passenger in his baggage (excluding carry-on baggage) if securely packed in fiber, wood, or metal boxes or other packagings specifically designed to carry small amounts of ammunition. This paragraph does not apply to persons traveling under the provisions of 14 CFR 108.11 (a) and (b).

6) [Reserved.]

7) Oxygen, or any hazardous material used for the generation of oxygen, for medical use by a passenger, which is furnished by the aircraft operator in accordance with 14 CFR Part 121.574 or Part 135.91. For the purposes of this paragraph, an aircraft operator that is not a certificate holder under 14 CFR Part 121 or Part 135, may apply this exception in conformance with 14 CFR Part 121.574 or Part 135.91 in the same manner as required for a certificate holder.

8) Human beings and animals with an implant medical device, such as a heart pacemaker, that contains Class 7 (radioactive material) or with radiopharmaceuticals that have been injected or ingested.

9) Smoke grenades, flares, or similar devices carried only for use during a sport parachute jumping activity.

10**) Safety matches or a lighter intended for use by an individual when carried on one's person. However, lighters containing unabsorbed liquid fuel (other than liquefied gas), lighter fuel, and lighter refills are not permitted on one's person or in checked or carry-on baggage.**

11) Smoke grenades, flares, and pyrotechnic devices affixed to aircraft carrying no person other than a required flight crewmember during any flight conducted at or a part of a scheduled air show or exhibition of aeronautical skill. The affixed installation accommodating the smoke grenades, flares, or pyrotechnic devices on the aircraft must be approved by the FAA for its intended use.

12) Hazardous material which are loaded and carried on or in cargo aircraft only, and which are to be dispensed or expanded during flight for weather control, forest preservation and protection, flood control, avalanche control purposes, or routine quality control testing of special fireworks manufactured for the Department of Defense, when the following requirements are met:

(i) Operations may not be conducted over densely populated areas, in a congested airway, or near any airport where air carrier passenger operations are conducted.

(ii) Each operator shall prepare and keep current a manual containing operational guidelines and handling procedures, for the use and guidance of flight, maintenance, and ground personnel concerned in the dispensing or expending of hazardous materials. The manual must be approved by the FAA Civil Aviation
Security Office responsible for the operator's overall aviation security program or the FAA Civil Aviation Security Office in the region where the operator is located. The manual must be approved by the FAA Civil Aviation Field Office responsible for reviewing the operator's hazardous materials program or the FAA Civil Aviation Security Field Office in the region where the operator is located. Each operation must be conducted in accordance with the manual.

(iii) No person other than a required flight crewmember, FAA inspector, or person necessary for handling or dispensing the hazardous material may be carried on the aircraft.

(iv) The operator of the aircraft must have advance permission from the owner of any airport to be used for the dispensing or expending operation.

(v) When dynamite and blasting caps are carried for avalanche control flights, the

explosives must be handled by, and at all times be under the control of, a qualified blaster. When required by State or local authority, the blaster must be licensed and the State or local authority must be identified in writing to the FAA Civil Aviation Security Office responsible for reviewing the operator's hazardous materials program or the FAA Civil Aviation Security Field Office in the region where the operator is located.

(vi) When special fireworks aerial illuminating flares, manufactured specifically for the DOD, are carried for in-flight routine quality control testing, the fireworks must be handled by, and at all times be under the control of, a qualified person who has been trained in accordance with a program approved by the local FAA Civil Aviation Security Office. The aircraft must be specially modified to conduct the testing operation and must be specifically approved for such operations by the local FAA Civil Aviation Security Field Office before the flight.

13) Carbon dioxide, solid (dry ice) when:

(i) In quantities not exceeding 2.3 kg (5.07 pounds) per package packed as prescribed by §173.217 of this subchapter and used as a refrigerant for the contents of the package. The package must be marked with the name of the contents being cooled, the net weight of the dry ice or an indication that the net weight is 2.3 kg (5.07 pounds) or less, and also marked "Carbon Dioxide, Solid" or "Dry Ice;"

(ii) Intended for use in food and beverage service aboard aircraft; or

(iii) In quantities not exceeding 2 kg (4.4 pounds) per passenger when used to pack perishables in carry-on baggage provided the package permits the release of carbon dioxide gas.

14) A transport incubator unit necessary to protect life or an organ preservation unit necessary to protect human organs provided:

(i) The compressed gas used to operate the unit is in an authorized DOT specification cylinder and is marked, labeled, filled, and maintained as prescribed in 49 CFR;

(ii) Each battery used in the operation of the unit is of the non-spillable type;

(iii) The unit is constructed so that valves, fittings, and gauges are protected from damage;

(iv) The pilot-in-command is advised when the unit is on board and when it is intended for use;

(v) The unit is accompanied by a person qualified to operate it;

(vi) The unit is secured in the aircraft in a manner so as not to restrict access to or use of any required emergency or regular exit or of the aisle in the passenger compartment; and,

(vii) Smoking within 3 meters (10 feet) of the unit is prohibited.

15) Alcoholic beverages, perfumes, colognes, and liquefied gas lighters that have been examined by the Bureau of Explosives (B of E) and approved by the Associate Administrator for Hazardous Materials Safety, carried aboard a passenger-carrying aircraft by the operator for use or sale on the aircraft.

16) Perfumes and colognes, purchased through duty-free sales, carried by passengers or crew in carry-on baggage.

17) Alcoholic beverages containing:

(i) Not more than 24% alcohol by volume; or

(ii) More than 24% and not more than 70% alcohol by volume when in retail packagings not exceeding 5 liters (1.3 gallons) carried by a crew member or passenger in checked or carry-on baggage, with a total net quantity per person of 5 liters (1.3 gallons) for such beverages.

18) Carbon dioxide gas cylinders worn by passengers for the operation of mechanical limbs and spare cylinders of a similar size for the same purpose in sufficient quantities to ensure an adequate supply for the duration of the journey.

19) A wheelchair or other battery-powered mobility aid equipped with a nonspillable battery, when carried as checked baggage, provided that-

(i) The battery meets the provisions of 173.159(d) for non-spillable batteries;

(ii) Visual inspection, including where necessary, removal of the battery, reveals no obvious defects (however, removal of the battery from the housing should be performed by qualified airline personnel only);

(iii) The battery is disconnected and terminals are insulated to prevent short circuits; and

(iv) The battery is securely attached to the wheelchair or mobility aid, is removed and placed in a strong, rigid packaging that is marked "NONSPILLABLE BATTERY" (unless fully enclosed in a rigid housing that is properly marked), or is handled in accordance with paragraph (a)(20)(iv) of this section.

20) A wheelchair or other battery-powered mobility aid equipped with a spillable battery, when carried as checked baggage, provided that-

(i) Visual inspection including, where necessary, removal of the battery, reveals no obvious defects (however, removal of the battery from the housing should be performed by qualified airline personnel only);

(ii) The battery is disconnected and terminals are insulated to prevent short circuits.

(iii) The pilot-in-command is advised, either orally or in writing, prior to departure, as to the location of the battery aboard the aircraft; and

(iv) The wheelchair or mobility aid is loaded, stowed, secured, and unloaded in an upright position, or the battery is removed, the wheelchair or mobility aid is carried as checked baggage without further restriction and the removed battery is carried in a strong, rigid, packaging under the following conditions:

(A) The packaging must be leak-tight and impervious to battery fluid. An inner liner may be used to satisfy this requirement if there is absorbent material placed inside of the liner and the liner has a leak-proof closure;

(B) The battery must be protected against short circuits, secured upright in the packaging, and be packaged with enough compatible absorbent material to completely absorb liquid contents in the event of rupture of the battery; and

(C) The packaging must be labeled with a CORROSIVE label, marked to indicate proper orientation, and marked with the words, "Battery, wet, with

wheelchair."

21) Hair curlers containing hydrocarbon gas, no more than one per passenger or crewmember, provided that the safety cover is securely fitted over the heating element. Gas refills for such curlers are not permitted in checked or carry-on baggage.

22) A mercurial barometer or thermometer carried as carry-on baggage only, by a representative of a government weather bureau or similar official agency, provided that individual advises the operator of the presence of the barometer or thermometer in his baggage. The barometer or thermometer must be packaged in a strong outer packaging having a sealed inner liner or a bag of strong, leak-proof and puncture-resistant material impervious to mercury, which will prevent the escape of mercury from the package irrespective of its position. The pilot-in-command must be informed of the presence of any such barometer or thermometer by the operator of the aircraft.

23) With the approval of the operator of the aircraft and as carry-on baggage, electrically powered heat-producing articles (e.g., battery-operated equipment, such as underwater torches and soldering equipment) which, if accidentally activated, will generate extreme heat and can cause fire. The heat-producing component or the energy source must be removed so as to prevent unintentional functioning during transport.

24) Reserved

25) With the approval of the aircraft operator, one small carbon dioxide cylinder fitted into a self-inflating lifejacket, plus one spare cartridge, may be carried by a passenger or crewmember in checked or carry-on baggage.

26) A small medical or clinical mercury thermometer for personal use, when carried in protective cases by passengers or crewmembers.

APPENDIX E

Guide for Preparing Hazardous Materials Incidents Reports

SEE ATTACHED

A COPY OF THE GUIDE FOR PREPARING HAZARDOUS MATERIALS INCIDENTS REPORTS AND THE FORM DOT F 5800.1 CAN BE DOWNLOADED FROM THE FOLLOWING INTERNET SITE:

http://hazmat.dot.gov/hazhome.htm